

REMARKS

Status of the claims

Claims 4, 7, 9, 11, 13-15, 17, 19, 20, 22-35 and 37-42 will be pending upon entry of this Amendment and Response to Office Action. Claims 25-30, 32-34, and 41-42 remain withdrawn. Claims 4, 35, and 38 have been indicated as allowable in the Office Action dated July 16, 2009.

Support for the amendments to claims 7, 31, 37 and 39-40 can be found at least in the claims as originally filed and paragraphs [0055], [0069], [0072], [0074] - [0078], [0080], [0099], [00102], [00103], [00110] – [00113], [00123], [00127], and Examples 1-9.

Rejection under 35 U.S.C. § 112

Claims 7, 31, 37 and 39-40 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention. Specifically, the Office states that claim 7 is indefinite as to how to screen candidate agonists and antagonists when the method merely recites the step of exposing an intact living cell containing the receptors and the G protein biosensor to the candidate agonists and antagonists without indicating the step of measuring FRET or BRET signals. Further, the Office states that claims 7 and 39-40 are indefinite because the claims lack an essential step in the process. Additionally, the Office states that claim 31 is indefinite because it is not clear how the steps of expression using intact living cells and obtaining a FRET profile are correlated with the method of classification of candidate agonists, antagonists and inverse agonists. The Office also states that claims 37, 39 and 40 are indefinite because the claims lack essential steps in the claimed methods and that it is not clear how to classify the candidate therapeutic molecule as agonists, antagonists or inverse agonists.

Applicant has amended claims 7, 31, 37 and 39-40 to address these rejections. Additionally, with respect to claim 31, the specification describes comparing FRET signal intensity after the addition of a candidate molecule with the FRET signal intensity before the addition of the candidate molecule to classify the candidate molecule. The specification states for example, that “[i]f the comparison shows that FRET signal intensity after the addition of a candidate molecule (b) is less than the FRET signal intensity before the addition of the candidate

molecule (a), then one classifies the molecule as an agonist candidate therapeutic drug molecule.¹ Thus, Applicant respectfully submits that one skilled in the art would know by reading the specification and the claim as currently amended how the steps of expression using intact living cells and obtaining a FRET profile are correlated with the method of classification of candidate agonists, antagonists and inverse agonists.

With respect to claims 37, 39, and 40, Applicant notes that the specification provides explicit definitions for “agonist”, “antagonist” and “inverse agonist” such that one skilled in the art would know the meaning of these terms by reading the specification.² Moreover the specification describes the use of a known agonist to establish a baseline FRET profile for comparison with a candidate molecule and then classifying the candidate as an antagonist therapeutic drug molecule or not and as an inverse agonist.³

Accordingly, Applicant respectfully requests withdrawal of the rejection of these claims under 35 U.S.C. § 112, second paragraph.

Obviousness Type Double Patenting

Claims 4 and 35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 45-46 of co-pending application 10/914,049.

According to MPEP § 804 Part I.B.1., “if a ‘provisional’ nonstatutory obviousness-type double patenting rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer.”

Applicant submits that the instant application is the earlier filed application. Specifically, the instant application was filed on February 4, 2004, whereas co-pending application 10/914,049 was filed on August 7, 2004. Accordingly, Applicant respectfully requests upon overcoming the above § 112 rejections as Applicant believe the above amendments and remarks

¹ See, Specification, p. 23, paragraph [00111]; see also, paragraphs [00116] – [00120].

² See, Specification, p. 19, paragraphs [0096] – [0098].

³ See, e.g., Specification, p. 24, paragraphs [00115] – [00121].

have done, the withdrawal of the rejection of claims 4 and 35 of the instant application based on the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 45-46 of co-pending application 10/914,049.

Claim Objections

Claims 9, 11, 13-15, 17, 19, 20, 22-24 and 38 are objected to as being dependent from a rejected claim. Applicant respectfully submits that the objections are moot in view of the comments above with respect to claims 4 and 35.

CONCLUSION

In view of the foregoing amendment and remarks, all claims now under examination in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully requested. The Commissioner is hereby authorized to charge fees, including a two (2) month extension, and any additional fees which may be required to Deposit Account No. 01-2384 in the name of ARMSTRONG TEASDALE LLP.

Respectfully submitted,

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